

REMARKS

The above amendments and the following remarks are fully and completely responsive to the Office Action dated February 8, 2005. Claims 4-9 are pending in this application with claims 1-3 canceled by the present Amendment. In the outstanding Office Action, claims 1-7 were rejected under 35 U.S.C. § 103(a). No rejection was made against claims 8 and 9. Consequently, Applicants consider these claims to contain allowable subject matter. No new matter has been added. Claims 4-9 are presented for consideration.

35 U.S.C. § 103(a)

Claims 1-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art and further in view of Schmutz et al. (U.S. Patent Publication No. 2001/0048727, "Schmutz"). In making this rejection, the Office Action asserts that the combination of these two references teaches and/or suggests the claimed invention. The Office Action also asserts that one of ordinary skill in the art would combine these two references.

The cancellation of claims 1-3 renders the rejection of these claims moot. Applicants respectfully request reconsideration of the rejection of claims 4-7.

Claim 4 recites in part:

...a controller for determining an actual signal receiving condition in accordance with a change in the signal level detected by the detector, and for setting gain control conditions of the automatic gain controller in accordance with a result of determination of an actual signal receiving condition.

By using an OFDM receiver having this feature, it is possible to determine a signal receiving condition in accordance with the level of a received OFDM signal. Thus, a desired gain control of the OFDM signal may be performed in accordance with an actual signal receiving condition. Therefore, it is possible to individually perform an appropriate gain control suitable for a stable signal receiving condition and also suitable for an unstable signal receiving condition (e.g., a fading condition). Consequently, a quick demodulation is ensured for either a stable or unstable signal receiving condition.

The Office Action admits that Applicants' admitted prior art does not teach the recited controller. The Office Action cites Figure 4 and paragraph [0031] of Schmutz as correcting this deficiency in Applicants' admitted prior art.

However, Schmutz, in paragraph [0031], teaches a receiver module of a base transceiver station for a time-division multiple access communication system. In this communication system, the amplitude values and associate time slot information are stored and determined from at least one previously received TDMA signal, where the previously received TDMA signal arrives during at least one earlier frame. Thereafter, an appropriate gain adjustment factor for this earlier received frame is calculated and applied to the currently received TDMA signal.

Consequently, the amplitude value of the gain adjustment is not based on the actual signal receiving condition but is based on the receiving condition of the signal in at least one earlier frame. Consequently, Schmutz does not determine an actual signal receiving condition in accordance with a change in the signal level detected by the detector and setting gain control conditions of the automatic gain controller in accordance with a result of determination of an actual signal receiving condition.

Accordingly, the combination of Applicants' admitted prior art and Schmutz fails to teach and/or suggest Applicants' invention. Specifically, the combination of these two references fails to teach and/or suggest a controller for determining an actual signal receiving condition in accordance with a change in the signal level detected by the detector, and for setting gain control conditions of the automatic gain controller in accordance with a result of determination of an actual signal receiving condition. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 4-7 under 35 U.S.C. § 103(a).

Claims 8 and 9

Applicants note that claims 8 and 9, which were added in the Preliminary Amendment filed on November 16, 2001, were not rejected or objected to. Accordingly, these claims contain allowable subject matter.

Conclusion

Applicants' amendments and remarks have overcome the rejection set forth in the Office Action dated February 8, 2005. Specifically, the cancellation of claims 1-3 has rendered moot the rejection of these claims under 35 U.S.C. § 103(a). Applicants' remarks have distinguished claims 4-7 from the combination of Applicants' admitted prior art and Schmutz and thus overcome the rejection of these claims under 35 U.S.C. § 103(a). The Office Action did not reject or object to either of claims 8 or 9. Accordingly, claims 4-9 are in condition for allowance. Therefore, Applicants respectfully request consideration and allowance of claims 4-9.

Applicants submit that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned attorney by telephone if it is believed that such contact will expedite the prosecution of the application.

In the event that this paper is not considered to be timely filed, Applicants respectfully petition for an appropriate extension of time.

The Commissioner is authorized to charge payment for any additional fees which may be required with respect to this paper to our Deposit Account No. 01-2300, making reference to attorney docket number 107156-00084.

Respectfully submitted,
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